# COMMITTEE WORKSHOP ON PROPOSED TRANSPORTATION ENERGY EFFICIENCY, ALTERNATIVE FUELS and VMT REDUCTION ANALYSES

2005 Energy Report
California Energy Commission
December 20, 2004



#### **Overview**

- Background 2003 Energy Report
- Goal of analyses
- Methodology
- Options to be evaluated
- Comments



#### Goals

- Update analyses previously performed to support the 2003 Energy Report
- Determine the merit of options to reduce California's transportation energy demand
- Invite broad participation of interested parties to identify options and conduct assessments of their value

## Methodology

- Options to increase efficiency and use alternative fuels are compared to reference scenarios (business-as-usual)
- Evaluate incremental costs and benefits of options to reduce transportation energy demand
- Reference scenarios projected by demand model (CalCars)
- Determine net benefits from 2005 to 2025



#### Methodology

- Net Benefits include direct environmental and non-environmental elements and external costs of petroleum dependency
- Environmental elements will be updated as needed by ARB staff
- Results will include a range of fuel prices, rebound effects and discounting of future costs and benefits



## **Proposed Efficiency Options for Analysis**

- Improved Vehicle Fuel Economy
- Fuel-Efficient Replacement Tires
- Vehicle Maintenance Practices
- Fuel Efficient Government Fleets
- More Efficient Diesel Trucks
- Truck Stop Electrification
- Low Viscosity Lubricating Oils



# Proposed Alternative Fuel Options for Analyses

- Biodiesel
- CNG for Light-duty Vehicles
- Electric Battery Technologies
- Ethanol
- Grid-Connected HEVs
- GTL Fuel
- Hydrogen
- LNG, CNG for Trucks
- LPG
- Heavy-duty Hybrid Hydraulic and HEVs



#### **Possible VMT Reduction Options**

- Expanded use of public transit
- Land use planning
- Telecommuting, Ridesharing, Compressed work week, Transportation allowances
- Voluntary accelerated vehicle retirement
- Reducing highway speed limits
- Hi-speed rail
- Efficient freight movement



#### **Comments**

- See workshop notice for instructions to submit written comments, clearly indicate for "2005 Energy Report Petroleum Analysis"
- Docket number 04-IEP-01-A
- Written comments by January 7, 2005

